



Any Size Parametric 90 Degree Shelf Bracket / Corner Bracket. Imperial & metric!



Iceman

VIEW IN BROWSER

updated 15. 12. 2024 | published 15. 12. 2024

Summary

Parametric 90 degree bracket for shelves, corners, and other projects. Any size from 20x20 mm to 8x8 inch and more.

[Household](#) > [Other House Equipment](#)

Tags: [shelf](#) [parametric](#) [bracket](#) [corner](#) [degree](#) [90](#)

This is a simple yet versatile parametric 90 degree bracket. This bracket can be re-sized for virtually any need via the OpenSCAD parameters. The bracket can also be set to 3 different styles; Normal Bevel, Low Poly, and Extra Low Poly.

If you're not familiar and/or hate using OpenSCAD, you can use MakerWorld's Customizer here (<https://makerworld.com/en/models/726914#profileId-674133>) to create any custom size brackets you may want. Prusa, this it really something you need to add to your site!!!!

I have pre-generated STLs for a set of imperial sizes from 1x1 to 8x8 inches that use #4, #6, or #8 screws. See the table below for the sizes

and screw placements/measurements. I will be adding more pre-generated metric STLs over the next week.

If you want to create a custom size, I have uploaded the OpenSCAD file that you can use to change the parameters. You can modify the height, length, width, screw hole placement and size, screw head size, and poly style, and more. I have also uploaded the .json file that contains the settings for the pre-generated STLs listed below.

NOTE: The OpenSCAD file is not perfect :-/ Sorry, but it take too much time to be perfect. If you make a setting too big or too small you might get something that doesn't even look like a bracket. However, you can use the settings in the .json file as a starting point. I needed to upload this as a txt file, so to use it, you'll need to rename it to 90DegreeBracket.json if you want the "Parameters" tab to display in OpenSCAD.

NOTE #2: Yes, I know the normal bevel style takes a looooooooooooooooooooo time to render(like 5 minute sometimes) :-(. Sadly OpenSCAD has some mesh issues sometimes, so I needed to use a very large polygon count to get everything to line up correctly :-(. I'll try to fix the rendering time later after I make a few other enhancements.

Pre-Generated STLs

Imperial

Bracket Size	Bracket Width	Styles	Screw Size	Screw 1 Placement	Screw 2 Placement
1x1 Inch	3/4 inch	Normal Bevel, Low Poly, Extra Low Poly	#4 or #6	5/8 inch	None
2x2 Inch	3/4 inch	Normal Bevel, Low Poly, Extra Low Poly	#4 or #6	5/8 inch	1 5/8 inch
3x3 Inch	3/4 inch	Normal Bevel, Low Poly, Extra Low Poly	#4 or #6	7/8 inch	2 1/2 inch
3x6 Inch	3/4 inch	Normal Bevel, Low Poly, Extra Low Poly	#4 or #6	3 inch side: 7/8 inch 6 inch side: 1 3/4 inch	3 inch side: 2 1/2 inch 6 inch side: 5 inch

4x4 Inch	3/4 inch	Normal Bevel, Low Poly, Extra Low Poly	#6	1 inch	3 3/8 inch
6x6 Inch	1 inch	Normal Bevel, Low Poly, Extra Low Poly	#6 or #8	1 1/2 inch	5 inch
6x8 Inch	1 inch	Normal Bevel, Low Poly, Extra Low Poly	#6 or #8	6 inch side: 1 1/2 inch 8 inch side: 2 inch	6 inch side: 5 1/4 inch 8 inch side: 7 inch
8x8 Inch	1 inch	Normal Bevel, Low Poly, Extra Low Poly	#8	2 inch	7 inch

Metric

Bracket Size	Bracket Width	Styles	Screw Size	Screw 1 Placement	Screw 2 Placement
20x20 mm	20 mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	12 mm	None
20x40 mm	20mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	20 mm side: 12 mm 40 mm side: 24 mm	None
30x30 mm	20 mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	10mm	22 mm
40x40 mm	20 mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	15 mm	32 mm

40x60 mm	20 mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	40 mm side: 14 mm 60 mm side: 21 mm	40 mm side: 30 mm 60 mm side: 45 mm
60x60 mm	20 mm	Normal Bevel, Low Poly, Extra Low Poly	M3 or M4	20 mm	50 mm

If you find anything wrong with the tables above, please let me know so I can fix it. Thanks!

Printing

I recommend printing these flat with a few pain on supports inside the screw access slot in the angle support. See images for an example.

Otherwise, use your discretion on fill and perimeters depending on how strong you need them to be.

Change Log

2024-09-22:

- Added 20x40, 40x60, and 60x60 mm brackets.
- Fix a small issue that was leaving a small amount of material behind after the screw hole access cutout was completed. Was only and issue in a small amount of situations... :-/ But I should have caught it sooner...
- Updated the 90DegreeBracket.json settings file. Which remember is uploaded as 90DegreeBracket.txt since Printables doesn't allow *.json uploads.

2024-09-15:

- Noticed the #8 screw holes were a little undersized. Made them a little larger.
- Updated the 90DegreeBracket.json settings file. Which remember is uploaded as 90DegreeBracket.txt since Printables doesn't allow *.json uploads.

2024-09-14:

- Added 20x20, 30x30, 40x40 mm STLs.
- Fixed a small issue in the scad file where it was possible to create an un-renderable STL due to a cutout not being wide enough and leaving a “skin/layer” behind.
- Updated the 90DegreeBracket.json settings file. Which remember is uploaded as 90DegreeBracket.txt since Printables doesn't allow *.json uploads.

Model files



OpenSCAD File

1 file

90degreebracket.scad



1x1 Inch

3 files



lowpoly_1x1inch_075inchwidth_num4screw.stl



extralowpoly_1x1inch_075inchwidth_num4screw.stl



normal_1x1inch_075inchwidth_num4screw.stl



2x2 Inch

6 files



extralowpoly_2x2inch_075inchwidth_num4screw.stl



lowpoly_2x2inch_075inchwidth_num6screw.stl



lowpoly_2x2inch_075inchwidth_num4screw.stl



extralowpoly_2x2inch_075inchwidth_num6screw.stl



normal_2x2inch_075inchwidth_num4screw.stl



normal_2x2inch_075inchwidth_num6screw.stl



3x3 Inch

6 files



lowpoly_3x3inch_075inchwidth_num6screw.stl



lowpoly_3x3inch_075inchwidth_num4screw.stl



normal_3x3inch_075inchwidth_num4screw.stl



extralowpoly_3x3inch_075inchwidth_num6screw.stl



extralowpoly_3x3inch_075inchwidth_num4screw.stl



normal_3x3inch_075inchwidth_num6screw.stl



3x6 Inch

6 files



lowpoly_3x6inch_075inchwidth_num6screw.stl



extralowpoly_3x6inch_075inchwidth_num4screw.stl



extralowpoly_3x6inch_075inchwidth_num6screw.stl



lowpoly_3x6inch_075inchwidth_num4screw.stl

normal_3x6inch_075inchwidth_num4screw.stl



normal_3x6inch_075inchwidth_num6screw.stl



4x4 Inch

3 files

extralowpoly_4x4inch_075inchwidth_num6screw.stl



lowpoly_4x4inch_075inchwidth_num6screw.stl



normal_4x4inch_075inchwidth_num6screw.stl



6x6 Inch

6 files

extralowpoly_6x6inch_1inchwidth_num6screw.stl



lowpoly_6x6inch_1inchwidth_num6screw.stl





normal_6x6inch_1inchwidth_num6screw.stl



lowpoly_6x6inch_1inchwidth_num8screw.stl



extralowpoly_6x6inch_1inchwidth_num8screw.stl



normal_6x6inch_1inchwidth_num8screw.stl



6x8 Inch

6 files



lowpoly_6x8inch_1inchwidth_num6screw.stl



extralowpoly_6x8inch_1inchwidth_num6screw.stl



normal_6x8inch_1inchwidth_num6screw.stl



lowpoly_6x8inch_1inchwidth_num8screw.stl



extralowpoly_6x8inch_1inchwidth_num8screw.stl



normal_6x8inch_1inchwidth_num8screw.stl



8x8 Inch

6 files



lowpoly_8x8inch_1inchwidth_num6screw.stl



extralowpoly_8x8inch_1inchwidth_num6screw.stl



normal_8x8inch_1inchwidth_num6screw.stl



lowpoly_8x8inch_1inchwidth_num8screw.stl



extralowpoly_8x8inch_1inchwidth_num8screw.stl



normal_8x8inch_1inchwidth_num8screw.stl



20x20 mm

6 files



extralowpoly_20x20mm_20mmwidth_m4screw.stl



extralowpoly_20x20mm_20mmwidth_m3screw.stl



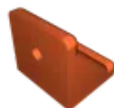
lowpoly_20x20mm_20mmwidth_m3screw.stl



lowpoly_20x20mm_20mmwidth_m4screw.stl



normal_20x20mm_20mmwidth_m4screw.stl



normal_20x20mm_20mmwidth_m3screw.stl



20x40 mm

6 files



extralowpoly_20x40mm_20mmwidth_m4screw.stl



lowpoly_20x40mm_20mmwidth_m4screw.stl

extralowpoly_20x40mm_20mmwidth_m3screw.stl



lowpoly_20x40mm_20mmwidth_m3screw.stl



normal_20x40mm_20mmwidth_m3screw.stl



normal_20x40mm_20mmwidth_m4screw.stl



30x30 mm

6 files

lowpoly_30x30mm_20mmwidth_m4screw.stl



extralowpoly_30x30mm_20mmwidth_m4screw.stl



lowpoly_30x30mm_20mmwidth_m3screw.stl



extralowpoly_30x30mm_20mmwidth_m3screw.stl





normal_30x30mm_20mmwidth_m4screw.stl



normal_30x30mm_20mmwidth_m3screw.stl



40x40 mm

6 files



extralowpoly_40x40mm_20mmwidth_m3screw.stl



extralowpoly_40x40mm_20mmwidth_m4screw.stl



lowpoly_40x40mm_20mmwidth_m4screw.stl



lowpoly_40x40mm_20mmwidth_m3screw.stl



normal_40x40mm_20mmwidth_m3screw.stl



normal_40x40mm_20mmwidth_m4screw.stl



40x60 mm

6 files

lowpoly_40x60mm_20mmwidth_m3screw.stl



extralowpoly_40x60mm_20mmwidth_m4screw.stl



lowpoly_40x60mm_20mmwidth_m4screw.stl



extralowpoly_40x60mm_20mmwidth_m3screw.stl



normal_40x60mm_20mmwidth_m3screw.stl



normal_40x60mm_20mmwidth_m4screw.stl



60x60 mm

6 files

extralowpoly_60x60mm_20mmwidth_m4screw.stl



extralowpoly_60x60mm_20mmwidth_m3screw.stl





lowpoly_60x60mm_20mmwidth_m4screw.stl



lowpoly_60x60mm_20mmwidth_m3screw.stl



normal_60x60mm_20mmwidth_m3screw.stl



normal_60x60mm_20mmwidth_m4screw.stl

Other files



OpenSCAD Settings for Pre-Generated STLs

1 file

90degreebracket.txt

License

This work is licensed under a
[Creative Commons \(4.0 International License\)](https://creativecommons.org/licenses/by-nc/4.0/)



Attribution-NonCommercial

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✗ | Commercial Use

- ✖ | Free Cultural Works
- ✖ | Meets Open Definition